

ABSTRACT OF THE DISCLOSURE

An immunoassay method based upon inhibition of a DNA polymerase enzyme accomplished by linking a ligand of the analyte to a primer through a covalent bond. The interaction between the primer-bound ligand and a receptor specific for the ligand inhibits the DNA polymerase enzyme from generating double stranded DNA. The degree of inhibition of double stranded DNA synthesis is inversely proportional to the concentration of analyte in the sample. The analyte is determined by measuring the formation of double stranded DNA, e.g., by a fluorescence DNA intercalation technique.